

WHAT IS CLAIMED IS:

1. A message signal, containing a message, or a machine readable stored message, wherein the message comprises:

- 5 a format having delimiters that both mark regions containing values of fields; and
 identify which fields those are.

2. A message signal or a stored message as claimed in
10 claim 1 wherein the said format is XML.

3. A message signal or a stored message as claimed in
claim 1 comprising a field, in said format, indicating a
recipient of the message.

15 4. A message signal or a stored message as claimed in
claim 1 comprising a field, in said format, indicating a
sender of the message.

20 5. A message signal or a stored message as claimed in
claim 1 comprising a field, in said format, indicating an
address replies should be sent to.

6. A message signal or a stored message as claimed in
25 claim 1 containing display layout information.

7. A message signal or a stored message as claimed in
claim 1 wherein said message is an email message.

30 8. A message signal or a stored message as claimed in
claim 7 wherein the said format is XML.

9. A message signal or a stored message as claimed in
claim 1 wherein said message is an instant messaging message.

10. A message signal or a stored message as claimed in claim 9 wherein the said format is XML.

11. A message signal or a stored message as claimed in claim 1 comprising a field, in said format, indicating an action to be carried out on the message.

12. A message signal or a stored message as claimed in claim 11 wherein the said format is XML.

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13. A message signal or a stored message as claimed in claim 11 wherein the field indicating the action to be carried out on the message indicates that it is to be sent.

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14. A message signal or a stored message as claimed in claim 11 wherein the field indicating the action to be carried out on the message indicates that it is to be stored.

15. A message signal or a stored message as claimed in claim 11 wherein the field indicating the action to be carried out on the message indicates that it is to be deleted.

16. A messaging system arranged to transmit messages using a message signal, containing a message, or to store a machine readable message, wherein the message comprises:

a format having delimiters that both mark regions
5 containing values of fields; and
identify which fields those are.

17. A messaging system as claimed in claim 16 wherein the said format is XML.

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18. A messaging system as claimed in claim 16 wherein said message is an email message.

15 19. A messaging system as claimed in claim 16 wherein said message is an instant messaging message.

20. A messaging system as claimed in claim 16 comprising a field, in said format, indicating an action to be carried
20 out on the message.

21. A messaging system as claimed in claim 20 wherein the field indicating the action to be carried out on the message indicates that it is to be sent.

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22. A messaging system as claimed in claim 20 wherein the field indicating the action to be carried out on the message indicates that it is to be stored.

30 23. A messaging system as claimed in claim 20 wherein the field indicating the action to be carried out on the message indicates that it is to be deleted.

24. A messaging system as claimed in claim 16, arranged to transfer messages in said format using a HTTP protocol.

25. A messaging system as claimed in claim 24 wherein
5 the HTTP protocol is HTTPS.

26. A messaging system as claimed in claim 24 wherein the messages transferred using HTTP are in XML format.

Table 1. Demographic characteristics of the study population	
Age (years)	65.4 ± 1.2
Gender (male/female)	102/108
Education (years)	12.5 ± 0.5
Marital status (married/divorced/widowed)	112/10/86
Occupation (retired/employed)	112/90
Income (USD/month)	1,200 ± 150
Health status (good/poor)	112/90
Smoking status (smoker/non-smoker)	10/190
Alcohol consumption (yes/no)	10/190
Comorbidities (hypertension/diabetes/cholesterol)	112/90
Medication (yes/no)	112/90
Family history (yes/no)	112/90
Genetic testing (yes/no)	112/90
Genetic testing results (normal/abnormal)	112/90
Genetic testing cost (USD)	1,000 ± 100
Genetic testing time (hours)	1.5 ± 0.5
Genetic testing accuracy (%)	95 ± 2
Genetic testing sensitivity (%)	90 ± 3
Genetic testing specificity (%)	98 ± 1
Genetic testing reliability (%)	99 ± 0.5
Genetic testing validity (%)	97 ± 1
Genetic testing robustness (%)	96 ± 1
Genetic testing reproducibility (%)	98 ± 0.5
Genetic testing repeatability (%)	99 ± 0.2
Genetic testing precision (%)	99.5 ± 0.1
Genetic testing accuracy (95% CI)	94.5 - 95.5
Genetic testing sensitivity (95% CI)	87.5 - 92.5
Genetic testing specificity (95% CI)	97.5 - 98.5
Genetic testing reliability (95% CI)	98.5 - 99.5
Genetic testing validity (95% CI)	96.5 - 97.5
Genetic testing robustness (95% CI)	95.5 - 96.5
Genetic testing reproducibility (95% CI)	97.5 - 98.5
Genetic testing repeatability (95% CI)	98.5 - 99.5
Genetic testing precision (95% CI)	99.0 - 99.8
Genetic testing accuracy (95% CI, lower bound)	94.0
Genetic testing accuracy (95% CI, upper bound)	96.0
Genetic testing sensitivity (95% CI, lower bound)	87.0
Genetic testing sensitivity (95% CI, upper bound)	93.0
Genetic testing specificity (95% CI, lower bound)	97.0
Genetic testing specificity (95% CI, upper bound)	99.0
Genetic testing reliability (95% CI, lower bound)	98.0
Genetic testing reliability (95% CI, upper bound)	100.0
Genetic testing validity (95% CI, lower bound)	96.0
Genetic testing validity (95% CI, upper bound)	98.0
Genetic testing robustness (95% CI, lower bound)	95.0
Genetic testing robustness (95% CI, upper bound)	97.0
Genetic testing reproducibility (95% CI, lower bound)	97.0
Genetic testing reproducibility (95% CI, upper bound)	99.0
Genetic testing repeatability (95% CI, lower bound)	98.0
Genetic testing repeatability (95% CI, upper bound)	100.0
Genetic testing precision (95% CI, lower bound)	99.0
Genetic testing precision (95% CI, upper bound)	100.0
Genetic testing accuracy (95% CI, lower bound, 95% CI, upper bound)	94.0 - 96.0
Genetic testing sensitivity (95% CI, lower bound, 95% CI, upper bound)	87.0 - 93.0
Genetic testing specificity (95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0
Genetic testing reliability (95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0
Genetic testing validity (95% CI, lower bound, 95% CI, upper bound)	96.0 - 98.0
Genetic testing robustness (95% CI, lower bound, 95% CI, upper bound)	95.0 - 97.0
Genetic testing reproducibility (95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0
Genetic testing repeatability (95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0
Genetic testing precision (95% CI, lower bound, 95% CI, upper bound)	99.0 - 100.0
Genetic testing accuracy (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	94.0 - 96.0 - 94.0 - 96.0
Genetic testing sensitivity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	87.0 - 93.0 - 87.0 - 93.0
Genetic testing specificity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0 - 97.0 - 99.0
Genetic testing reliability (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0 - 98.0 - 100.0
Genetic testing validity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	96.0 - 98.0 - 96.0 - 98.0
Genetic testing robustness (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	95.0 - 97.0 - 95.0 - 97.0
Genetic testing reproducibility (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0 - 97.0 - 99.0
Genetic testing repeatability (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0 - 98.0 - 100.0
Genetic testing precision (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	99.0 - 100.0 - 99.0 - 100.0
Genetic testing accuracy (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	94.0 - 96.0 - 94.0 - 96.0 - 94.0 - 96.0
Genetic testing sensitivity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	87.0 - 93.0 - 87.0 - 93.0 - 87.0 - 93.0
Genetic testing specificity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0 - 97.0 - 99.0 - 97.0 - 99.0
Genetic testing reliability (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0 - 98.0 - 100.0 - 98.0 - 100.0
Genetic testing validity (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	96.0 - 98.0 - 96.0 - 98.0 - 96.0 - 98.0
Genetic testing robustness (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	95.0 - 97.0 - 95.0 - 97.0 - 95.0 - 97.0
Genetic testing reproducibility (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	97.0 - 99.0 - 97.0 - 99.0 - 97.0 - 99.0
Genetic testing repeatability (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	98.0 - 100.0 - 98.0 - 100.0 - 98.0 - 100.0
Genetic testing precision (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound)	99.0 - 100.0 - 99.0 - 100.0 - 99.0 - 100.0
Genetic testing accuracy (95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95% CI, upper bound, 95% CI, lower bound, 95	

27. A server arranged to receive or send one message signals, containing a message, or to store a machine readable message, wherein the message comprises:

- 5 a format having delimiters that both mark regions containing values of fields; and
 identify which fields those are.

28. A server as claimed in claim 27 wherein the said
10 format is XML.

29. A server as claimed in claim 27 arranged to convert message signals or stored messages in said format to another format and to transmit converted messages in said other
15 format.

30. A server as claimed in claim 27 arranged to convert messages in another format to said format and to transmit converted messages in said format.
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31. A server as claimed in claim 30 arranged to transmit said converted messages to a client.

32. A server as claimed in claim 27 arranged to retrieve
25 messages stored on another server which were addressed to that other server, or a user account on that server, and to transmit retrieved messages to a client.

33. A server as claimed in claim 27 arranged to convert
30 messages in said format to a format including display layout information.

34. A server as claimed in claim 33 wherein said format is XML and the server is arranged to perform said conversion

to a format including display layout information using Extensible Stylesheet Language (XSL).

35. A server as claimed in claim 33 wherein said
5 conversion is to Wireless Mark-up Language (WML).

36. A server as claimed claim 27 comprising a message store wherein the server is arranged to store messages for a client between sessions for that client.

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37. A server as claimed claim 27 wherein the server is arranged not to store messages for a client between sessions for that client.

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38. A server as claimed in claim 27, arranged to transfer messages in said format using a HTTP protocol.

39. A server as claimed in claim 38 wherein the HTTP protocol is HTTPS.

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40. A server as claimed in claim 38 wherein the messages transferred using HTTP are in XML format.

41. A server as claimed in claim 27 arranged to carry
25 out an action on a message, that action being indicated in a field of the message, in said format.

42. A server as claimed in claim 41 wherein the field indicating the action to be carried out on the message
30 indicates that it is to be sent and the server is responsive to that field to send the message.

43. A server as claimed in claim 41 wherein the field indicating the action to be carried out on the message

indicates that it is to be stored and the server is responsive to that field to store the message.

44. A server as claimed in claim 41 wherein the field
5 indicating the action to be carried out on the message
indicates that it is to be deleted and the server is
responsive to that field to delete the message.

45. A server as claimed in claim 27 comprising a file
10 defining which said delimited fields the message signal of
the stored message should or may contain.

46. A server as claimed in claim 45 that interprets said
message signal or stored messages using said file defining
15 the fields.

47. A server as claimed in claim 45 wherein said file
defining the fields is in XML format.

48. A client arranged to receive or send message signals, containing a message, or to store a machine readable message, wherein the message comprises:

- 5 a format having delimiters that both mark regions containing values of fields; and
 identify which fields those are.

49. A client as claimed in claim 48 wherein the said
10 format is XML.

50. A client as claimed in claim 48 comprising a message store, wherein the client is arranged to store messages between sessions with a server.

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51. A client as claimed in claim 48 wherein the client is arranged not to store messages between sessions with a server.

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52. A client as claimed in claim 48 comprising a file defining which said delimited fields the message signal of the stored message should or may contain.

53. A client as claimed in claim 52 that interprets said
25 message signal or stored messages using said file defining the fields.

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54. A client as claimed in claim 52 wherein said file defining the fields is in XML format.

55. A client as claimed 48, arranged to transfer messages in said format using an HTTP protocol.

56. A client as claimed in claim 55 wherein the HTTP protocol is HTTPS.

57. A client as claimed in claim 55 wherein the message
5 transferred using HTTP is in XML format.

58. A client as claimed in claim 48 arranged to carry out an action on a message, that action being indicated in a field of the message, in said format.

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59. A client as claimed in claim 58 wherein the field indicating the action to be carried out on the message indicates that it is to be sent and the server is responsive to that field to send the message.

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60. A client as claimed in claim 58 wherein the field indicating the action to be carried out on the message indicates that it is to be stored and the server is responsive to that field to store the message.

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61. A client as claimed in claim 58 wherein the field indicating the action to be carried out on the message indicates that it is to be deleted and the server is responsive to that field to delete the message.

62. A computer, program product for implementing a messaging system, a client, or a server, arranged to receive or send message signals, containing a message, or to store a
5 machine readable message, wherein the message comprises:

a format having delimiters that both mark regions containing values of fields; and

identify which fields those are.

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63. A method of transferring message signals wherein the message signals comprises:

a format having delimiters that both mark regions
5 containing values of fields; and
identify which fields those are.

64. A method of transferring message signals as claimed
in claim 63 that uses a HTTP protocol to transfer the message
10 signal.

65. A method of transferring message signals as claimed
in claim 64 wherein the HTTP protocol is HTTPS.

15 66. A method of transferring message signals as claimed
in claim 63 wherein the signals are in XML format.

67. A method of storing a message wherein the stored message comprises:

a format having delimiters that both mark regions
5 containing values of fields; and
identify which fields those are.

68. A method of storing messages as claimed in claim 67 wherein the stored messages are in XML format.

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TOP SECRET